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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,153	10/27/2003	Eric Edward Lennon	KCX-1359 (18231)	3016
7590 Mr. Stephen E. Bondura Dority & Manning, P.A. P.O. Box 1449 Greenville, SC 29602			EXAMINER BUTLER, PATRICK	
			ART UNIT 1732	PAPER NUMBER
			MAIL DATE 09/06/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/694,153

Applicant(s)

LENNON ET AL.

Examiner

Patrick Butler

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 13-23 is/are pending in the application.
- 4a) Of the above claim(s) 6-10 and 17-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 11, 13-16 and 23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 23 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

With respect to Claim 23, the claim requires the force of attenuation to be provided "air consisting of attenuation air only entering... from the drawing slot sidewall." The Examiner interprets this to mean that no other air may contribute to the attenuation force. This is more than with the Specification's acknowledgement of air entering from a specific sidewall because the Specification does not preclude air from the other sidewall as the claim does; the Specification only requires a specific wall to provide air.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 11 and 13-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to Claim 11, lines 11 and 12, the Claim requires one electrostatic charging unit to include an emitter device on each diverging sidewall. However, it would be unclear how the single device would be composed of opposing emitters, particularly given Applicant's definition of a unit having an emitter and target in Claim 1, lines 11 and 12. For purposes of examination, the Examiner assumes that the claim was meant to indicate that each of the two charging units includes a target device and an emitter device consistent with Claim 1. Claims 13-16 are rejected via their dependency.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 11, and 23 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 10/694,420. Although the conflicting claims are not identical, they are

not patentably distinct from each other because they claim forming fiber, electrostatically directing it, and forming a web.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1, 11, and 23 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 5, and 20 of copending Application No. 10/325,140. Although the conflicting claims are not identical, they are not patentably distinct from each other because they claim forming fiber, electrostatically directing it, and forming a web.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1, 11, and 23 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 10/687,006. Although the conflicting claims are not identical, they are not patentably distinct from each other because they claim forming fiber, redirecting it, which would include electrostatically, and forming a web.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haynes '071 (WO 02/52071) in view of Maggio '134 (WO 00/65134 A1; US Patent No. 6,966,762 B1 relied upon for translation and citations) and Kisler (US Patent No. 4,517,143).

With respect to Claim 1, Haynes '071 teaches providing a plurality of fibers 12, subjecting the fibers to a pneumatic attenuation force in a drawing slot 14, the attenuation force imparting a velocity to the fibers, subjecting the fibers to an applied electrostatic charge before the fibers at the end of the draw slot using an electrostatic charging unit 20 and 22 with oppositely directed components (each charging unit including an emitter device and a target device) (see Fig. 1), and collecting the fibers into a web on a moving surface 26.

Haynes '071 does not expressly teach providing a diffusion chamber.

Maggio teaches providing a diffusion chamber 6 after the drawing slot 5.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Maggio '134's diffusion chamber with Haynes '071 nonwoven web process in order to adjust the width of the bundle of fibers and impact speed of the filaments on the receiving belt (see col. 3, lines 39-43).

Haynes '071 does not expressly teach having two or more oppositely directed electrostatic charging units such that at least one emitter device is configured on each side of the fibers so that an electrostatic charge is generated from opposite directions transverse to the direction of travel of the plurality of fibers.

Kisler teaches that when imparting charges, the charge can often vary significantly after an electrostatic charging (see fig. 1A, ref. no. 28; fig. 2, sections A and B). Thus, multiple charging steps using opposite polarity will produce a uniformly charged material (two or more oppositely directed electrostatic charging units such that at least one emitter device is configured on each side of the fibers so that an electrostatic charge is generated from opposite directions transverse to the direction of travel of the plurality of fibers) (see col. 2, lines 31-49; fig. 1A, ref. no. 28 and 42; fig. 2, sections A, B, and D).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Kisler's teaching of using multiple, oppositely-directed electrostatic charging units in the process taught by Haynes '071 because they are within the same field and solve the same problem of desiring to impart a charge and to impart the charge uniformly (see Kisler, col. 2, lines 31-49; fig. 1A, ref. no. 28 and 42; fig. 2, sections A, B, and D).

With respect to Claim 3, Maggio '134's sidewalls are unvented (See Fig. 3, Ref. No. 15).

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Haynes '071 (WO 02/52071) in view of Maggio '134 (WO 00/65134 A1; US Patent No. 6,966,762 B1 relied upon for translation and citations) and Kisler (US Patent No. 4,517,143) as applied to Claim 1, and further in view of Trimble (WO 93/21370).

With respect to Claim 2, Haynes '071 and Maggio '134 teach a process of making a non-woven as previously described.

Haynes '071 and Maggio '134 do not appear to expressly teach having electrostatic charging units that are in a staggered configuration.

Trimble teaches making the electrostatic charging units locations staggered up and down rather than all in a single line (see Fig. 4, Ref. No. 74 and page 15, lines 24-27).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Trimble's charging unit positions with Haynes '071's and Maggio '134's non-woven web forming process in order to form a more even distribution of filaments in the web (see Trimble, page 20, lines 14-16) and because it is an alternative embodiment of a known charging unit configuration.

Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haynes '071 (WO 02/52071) in view of Maggio '134 (WO 00/65134 A1; US Patent No. 6,966,762 B1 relied upon for translation and citations) and Kisler (US Patent No. 4,517,143) as applied to Claim 1, and further in view of Haynes '379 (US Patent No. 6,117,379).

With respect to Claim 4, Haynes '071 and Maggio '134 teach a process of making a non-woven as previously described.

Haynes '071 and Maggio do not appear to expressly teach that the pneumatic attenuation force is provided by perturbed attenuation air.

Haynes '379 teaches using a bar arrangement 10 in front of airflow, which causes turbulent (perturbed) gas flow (see Haynes '379 col. 1, lines 62-67).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Haynes '379's bar arrangement in front of the air flow of the drawing chambers 16 of Haynes '071 and Maggio '134 in order to quench or cool via better penetration of the gas among the filaments (see Haynes '379 col. 1, lines 62-67). This would reduce time spent between die and slot for quenching or cooling because some or more quenching would occur inside the slot.

With respect to Claim 5, Haynes '071 and Maggio '134 teach a process of making a non-woven as previously described.

Haynes '071 and Maggio '134 do not appear to expressly teach at least one of the opposed diverging sidewalls comprises at least one vortex generator.

Haynes '379 teaches using a bar arrangement 10 in front of airflow, which causes turbulent (perturbed) gas flow (see Haynes '379 col. 1, lines 62-67).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Haynes '379's bar arrangement in front of the air flow of the (Maggio '134's) diffusion chamber 14 of Haynes '071 and Maggio '134 because it would cause gas flow turbulence (see Haynes '379 col. 1, lines 62-67), and it is desirous to slow down the air flow at the exit of the diffusion chamber in order to distribute the filaments randomly over a receiving belt (see Maggio '134, col. 1, lines 55-57).

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Maggio '381 (FR 2,825,381; US Patent No. 6,974,316 B2 relied upon for translation and citations) in view of Haynes '071 (WO 02/52071) and Kisler (US Patent No. 4,517,143).

With respect to Claim 11, Maggio teaches providing a plurality of fibers F, subjecting the fibers to a pneumatic attenuation force in a drawing slot (see Fig. 3, at Ref. No. 13), reducing the velocity of the fibers in a diffusion chamber 6, subjecting the fibers to an applied electrostatic charge 17 while the fibers are in the diffusion chamber, and collecting the fibers on a moving web surface 7.

Maggio '381 does not appear to expressly teach each charging unit including an emitter device and a target device and at least one electrostatic charging unit is located upon each of the diverging sidewalls.

Haynes '071 teaches that subjecting the fibers to an electrostatic charging unit 18 and 22 with oppositely directed components (each charging unit including an emitter device and a target device) (see Fig. 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Haynes '071's oppositely directed charging units in the diverging sidewalls of Maggio '381 in order to give improvements maximum overall voltage (see Haynes '071, page 16, Table 1), improve formation (page 16, lines 33-35), and because it is a known configuration for electrostatic charging.

Maggio '381 in view of Haynes '071 does not expressly teach having two or more oppositely directed electrostatic charging units such that at least one emitter device is configured on each side of the fibers so that an electrostatic charge is generated from opposite directions transverse to the direction of travel of the plurality of fibers.

Kisler teaches that when imparting charges, the charge can often vary significantly after an electrostatic charging (see fig. 1A, ref. no. 28; fig. 2, sections A and

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B). Thus, multiple charging steps using opposite polarity will produce a uniformly charged material (having two or more oppositely directed electrostatic charging units such that at least one emitter device is configured on each side of the fibers so that an electrostatic charge is generated from opposite directions transverse to the direction of travel of the plurality of fibers) (see col. 2, lines 31-49; fig. 1A, ref. no. 28 and 42; fig. 2, sections A, B, and D).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Kisler's teaching of using multiple, oppositely-directed electrostatic charging units in the process taught by Maggio '381 in view of Haynes '071 because they are within the same field and solve the same problem of desiring to impart a charge and to impart the charge uniformly (see Kisler, col. 2, lines 31-49; fig. 1A, ref. no. 28 and 42; fig. 2, sections A, B, and D).

Claims 11 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmit (WO 02/34990 A1; USPAP 2004/0028763 A1 relied upon for translation and citations) in view of Kisler (US Patent No. 4,517,143).

With respect to Claim 11, Schmit teaches forming fibers [0004], subjecting the fibers to pneumatic attenuation force in a drawing slot, the attenuation force imparting a velocity to the fibers [0004], reducing the velocity of the fibers in a diffusion chamber formed between opposed diverging sidewalls [0004], subjecting the fibers to an applied electrostatic charge while the fibers are in the diffusion chamber by one electrostatic charging unit with oppositely directed components 11 and 8, with 11 located upon a diverging sidewall 15 and 8 located on the other diverging sidewall 14 (each charging

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unit including an emitter device and a target device) (see [0006], [0020], [0021], and fig. 2 and 3), and collecting the fibers into a web on a moving forming surface (see Fig. 1, Ref. No. 7).

Schmit does not expressly teach having two or more oppositely directed electrostatic charging units such that at least one emitter device is configured on each side of the fibers so that an electrostatic charge is generated from opposite directions transverse to the direction of travel of the plurality of fibers.

Kisler teaches that when imparting charges, the charge can often vary significantly after an electrostatic charging (see fig. 1A, ref. no. 28; fig. 2, sections A and B). Thus, multiple charging steps using opposite polarity will produce a uniformly charged material (having two or more oppositely directed electrostatic charging units such that at least one emitter device is configured on each side of the fibers so that an electrostatic charge is generated from opposite directions transverse to the direction of travel of the plurality of fibers) (see col. 2, lines 31-49; fig. 1A, ref. no. 28 and 42; fig. 2, sections A, B, and D).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Kisler's teaching of using multiple, oppositely-directed electrostatic charging units in the process taught by Schmit because they are within the same field and solve the same problem of desiring to impart a charge and to impart the charge uniformly (see Kisler, col. 2, lines 31-49; fig. 1A, ref. no. 28 and 42; fig. 2, sections A, B, and D).

With respect to Claim 15, Schmit teaches that the diffuses can have no openings (unvented) (see [0010]. Though Schmit states "preferably" with respect to having vents, this is merely a preferred embodiment.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Maggio '381 (FR 2,825,381; US Patent No. 6,974,316 B2 relied upon for translation and citations) in view of Haynes '071 (WO 02/52071) and Kisler (US Patent No. 4,517,143) as applied to Claim 11, and further in view of Trimble (WO 93/21370).

With respect to Claim 13, Maggio '381 teaches a process of making a non-woven as previously described.

Maggio '381 does not appear to expressly teach having one electrostatic charging unit located substantially closer to the diffusion chamber than at least one other electrostatic charging unit.

Trimble teaches making the electrostatic charging units locations staggered (substantially closer to the diffusion chamber than at least one other electrostatic charging unit) (see Fig. 4, Ref. No. 74 and page 15, lines 24-27).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Trimble's charging unit positions with Maggio '381's non-woven web forming process in order to form a more even distribution of filaments in the web (see Trimble, page 20, lines 14-16) and because it is an alternative embodiment of a known charging unit configuration.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schmit (WO 02/34990 A1; USPAP 2004/0028763 A1 relied upon for translation and citations) in

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view of Kisler (US Patent No. 4,517,143) as applied to Claim 11, and further in view of Trimble (WO 93/21370).

With respect to Claim 13, Schmit teaches a process of making a non-woven as previously described.

Schmit does not appear to expressly teach having one electrostatic charging unit located substantially closer to the diffusion chamber than at least one other electrostatic charging unit.

Trimble teaches making the electrostatic charging units locations staggered (substantially closer to the diffusion chamber than at least one other electrostatic charging unit) (see Fig. 4, Ref. No. 74 and page 15, lines 24-27).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Trimble's charging unit positions with Schmit's non-woven web forming process in order to form a more even distribution of filaments in the web (see Trimble, page 20, lines 14-16) and because it is an alternative embodiment of a known charging unit configuration.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Maggio '381 (FR 2,825,381; US Patent No. 6,974,316 B2 relied upon for translation and citations) in view of Haynes '071 (WO 02/52071) and Kisler (US Patent No. 4,517,143) as applied to Claim 11 above, and further in view of Haynes '379 (US Patent No. 6,117,379).

With respect to Claim 14, Maggio '381 teaches making a nonwoven web as previously described but does not appear to expressly teach that the pneumatic attenuation force is provided by perturbed attenuation air.

Haynes '379 teaches using a bar arrangement 10 in front of airflow, which causes turbulent (perturbed) gas flow (see Haynes '379 col. 1, lines 62-67).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Haynes '379's bar arrangement in front of the air flow of the Maggio '381 in order to quench or cool via better penetration of the gas among the filaments (see Haynes '379 col. 1, lines 62-67). This would reduce time spent between die and slot for quenching or cooling because some or more quenching would occur inside the slot.

Claims 14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmit (WO 02/34990 A1; USPAP 2004/0028763 A1 relied upon for translation and citations) and Kisler (US Patent No. 4,517,143) as applied to Claim 11, and further in view of Haynes '379 (US Patent No. 6,117,379).

With respect to Claim 14, Schmit teaches a process of making a non-woven as previously described.

Schmit does not appear to expressly teach that the pneumatic attenuation force is provided by perturbed attenuation air.

Haynes '379 teaches using a bar arrangement 10 in front of airflow, which causes turbulent (perturbed) gas flow (see Haynes '379 col. 1, lines 62-67).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Haynes '379's bar arrangement in front of the air flow of the slot of Schmit in order to quench or cool via better penetration of the gas among the filaments (see Haynes '379 col. 1, lines 62-67). This would reduce time spent between die and slot for quenching or cooling because some or more quenching would occur inside the slot.

With respect to Claim 16, Schmit teaches a process of making a non-woven as previously described.

Schmit does not appear to expressly teach that at least one of the opposed diverging sidewalls comprises at least one vortex generator.

Haynes '379 teaches using a bar arrangement 10 in front of airflow, which causes turbulent (perturbed) gas flow (see Haynes '379 col. 1, lines 62-67).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Haynes '379's bar arrangement in front of the air flow of the from the lateral openings¹⁶ of the diffusion chamber 14 of Schmit because it would cause gas flow turbulence (see Haynes '379 col. 1, lines 62-67), which would spread the fiber curtain, it is desirous to spread the curtain since it increases uniformity of the web (see Schmit [0004]).

Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Maggio '134 (WO 00/65134 A1; US Patent No. 6,966,762 B1 relied upon for translation and citations) in view of Davis et al. (US Patent No. 6,660,218 B2).

With respect to Claim 23, Maggio '134 teaches providing a plurality of fibers F, subjecting the fibers to an attenuation force in a drawing slot (at Fig. 3, Ref. No. 13), subjecting the fibers to a electrostatic charging unit 11 located on the sidewall, reducing the velocity of the fibers in a diffusion chamber being formed substantially between opposed diverging sidewalls 15, and collecting the fibers onto a web of a moving surface 7.

Maggio '134 does not appear to expressly teach providing attenuation force by providing air consisting of attenuation air only entering the drawing slot from the drawing slot sidewall.

Davis teaches providing air from a nozzle to direct filaments with one air nozzle (attenuation air only entering the drawing slot from one slot sidewall (see col. 1, lines 37-51)).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Davis's attenuation air supply configuration from a slot sidewall with Maggio '134's teaching of attenuation in order to minimize cost of supplied plant air and to minimizing non-uniformity in the laydown process (see Davis, col. 1, lines 14-34). Moreover, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Davis's use of the attenuation to direct the filaments (see Davis, col. 1, lines 37-51) to direct the air toward Maggio's electrostatic charging unit 11 because Davis provides additional direction control to achieve Maggio's process of subjecting the filaments to the charging unit 11.

Response to Arguments

Applicant's arguments filed 11 June 2007 have been fully considered but they are not persuasive.

Applicant argues with respect to the 35 USC §103 rejections. Applicant's arguments appear to be on the grounds that:

1) The references as combined lack the newly claimed limitation of opposing electrostatic charging units composed of an emitter device and a target device.

2) Hayes '071 in view of Maggio '134 is not a proper combination given Maggio's teaching that the charging unit is situated downstream of the diffuser or integrated within the diffuser but not before the diffuser.

3) The references as combined including Kisler fail to provide motivation to combine with Kisler because Kisler is not drawn to fibers, particularly not a curtain of fibers, is drawn to uniform charging, and is also useful for neutralize the polarity of the web.

4) Maggio '134 does not provide for attenuation force by providing air consisting of attenuation air only entering the drawing slot from the drawing slot sidewall as amended.

The Applicant's arguments are addressed as follows:

1 and 4) Applicant's arguments with respect to newly added limitation of:

- having opposing electrostatic charging units composed of an emitter device and a target device
- attenuation force by providing air consisting of attenuation air only entering the drawing slot from the drawing slot sidewall

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have been considered but are moot in view of the new ground(s) of rejection necessitated by the amendment.

2) Maggio '134 is not relied upon to place the electrostatic charging unit in the drawing slot since such teaching is already provided by Hayes '071's teaching of placing the charging unit 20 and 22 at the bottom of the drawing slot (see Hayes '071, Fig. 1).

2) Moreover, Maggio '134 does teach having the electrostatic charging above a divergent zone 15 (see col. 5, lines 44-47).

3) In response to applicant's argument that Kisler is drawn to webs not fibers, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Therefore, Kisler is relevant and provides appropriate teachings since Kisler is also within the field of providing charge to materials and desires to provide a uniform charge across an area desired to be charged.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick Butler whose telephone number is (571) 272-8517. The examiner can normally be reached on Mon.-Thu. 7:30 a.m.-5 p.m. and alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on (571) 272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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